

## CLAIMS:

1. A method of coding a sound signal as various streams of frames, in which the sound signal is subdivided into various segments and each segment is coded to a corresponding frame, characterized in that the sound signal is represented as a set of sine waves defined by their amplitude and frequency, in that the amplitude and the frequency of each sine wave in a segment are stored in a frame corresponding to this segment, independently of other segments, and in that the frames thus obtained are numbered and subdivided into  $n$  streams, where frame number  $i$  is subdivided into stream  $i$  modulo  $n$ .

2. A coding method as claimed in claim 1, characterized in that also the phase of each sine wave in a segment is stored in the frame corresponding to this segment.

3. A coding method as claimed in claim 1 or 2, characterized in that  $n$  equals 2.

4. A method of decoding a sound signal which comprises various streams of numbered frames, in which each frame contains information about a segment of the sound signal, characterized in that an arbitrary stream is selected from the streams of frames, after which the sound signal is reconstructed by generating sine waves for each segment of the sound signal for which a corresponding frame is present in the selected stream, which sine waves are based on the information in the corresponding frame, and generating sine waves for each segment of the sound signal for which no corresponding frame is present in the selected stream, which sine waves are based on the information in the frames corresponding to a segment selected from a segment immediately preceding and a segment immediately following the respective segment.

5. A decoding method as claimed in claim 4, characterized in that sine waves are generated for a segment of the sound signal for which no corresponding frame occurs in the selected stream, but for which a corresponding frame does occur in another stream, which sine waves are based on the information in the corresponding frame from the other stream.

6. A system for coding a sound signal as various streams of frames, in which the sound signal is subdivided into various segments and each segment is coded to a corresponding frame, characterized in that the coding system comprises means for representing a sound signal as a set of sine waves defined by their amplitude and frequency, in that the amplitude and the frequency of each sine wave in a segment are stored in a frame that corresponds to this segment, independently of other segments, and in that the frames thus obtained are numbered and subdivided into  $\underline{n}$  streams, where frame number  $\underline{i}$  is assigned to stream  $\underline{i}$  modulo- $\underline{n}$ .

7. A coding system as claimed in claim 6, characterized in that the coding system also includes means for storing the phase of each sine wave in a segment in the frame corresponding to this segment.

8. A coding system as claimed in claim 6 or 7, characterized in that  $\underline{n}$  equals two.

9. A system for decoding a sound signal which comprises various streams of numbered frames, in which each frame contains information about a segment of the sound signal, characterized in that the decoding system is arranged for selecting an arbitrary stream from the streams of frames and then reconstructing the sound signal by generating sine waves for each segment of the sound signal for which a corresponding frame is present in the selected stream, which sine waves are based on the information in the corresponding frame, and for generating sine waves for each segment of the sound signal for which no corresponding frame is present in the selected stream, which sine waves are based on the information in the frames corresponding to a segment selected from a segment immediately preceding and a segment immediately following the respective segment.

10. A decoding system as claimed in claim 9, characterized in that the decoding system is also arranged for generating sine waves for a segment of the sound signal for which a corresponding frame does not occur in the selected stream, but for which a corresponding frame does occur in another stream, which sine waves are based on the information in the corresponding frame from the other stream.

11. A system arranged for recording and playing back sound signals, comprising a coder as claimed in claim 8, a storage system and a decoder as claimed in claim 10, in which:

the storage system comprises a storage medium divided into at least a first and

medium and the other stream offered by the coder in the second part, and when the available

the decoder is arranged for receiving two streams of frames from the storage

medium if the storage system is in state A and for receiving one stream from one of the parts of the storage medium if the storage system is in state B.

項目	1990年	1991年	1992年	1993年	1994年	1995年	1996年	1997年	1998年	1999年	2000年	2001年	2002年	2003年	2004年	2005年	2006年	2007年	2008年	2009年	2010年	2011年	2012年	2013年	2014年	2015年	2016年	2017年	2018年	2019年	2020年	2021年	2022年	2023年	2024年	2025年	2026年	2027年	2028年	2029年	2030年	2031年	2032年	2033年	2034年	2035年	2036年	2037年	2038年	2039年	2040年	2041年	2042年	2043年	2044年	2045年	2046年	2047年	2048年	2049年	2050年	2051年	2052年	2053年	2054年	2055年	2056年	2057年	2058年	2059年	2060年	2061年	2062年	2063年	2064年	2065年	2066年	2067年	2068年	2069年	2070年	2071年	2072年	2073年	2074年	2075年	2076年	2077年	2078年	2079年	2080年	2081年	2082年	2083年	2084年	2085年	2086年	2087年	2088年	2089年	2090年	2091年	2092年	2093年	2094年	2095年	2096年	2097年	2098年	2099年	2100年																																																								
1. 人口	120,000,000	125,000,000	130,000,000	135,000,000	140,000,000	145,000,000	150,000,000	155,000,000	160,000,000	165,000,000	170,000,000	175,000,000	180,000,000	185,000,000	190,000,000	195,000,000	200,000,000	205,000,000	210,000,000	215,000,000	220,000,000	225,000,000	230,000,000	235,000,000	240,000,000	245,000,000	250,000,000	255,000,000	260,000,000	265,000,000	270,000,000	275,000,000	280,000,000	285,000,000	290,000,000	295,000,000	300,000,000	305,000,000	310,000,000	315,000,000	320,000,000	325,000,000	330,000,000	335,000,000	340,000,000	345,000,000	350,000,000	355,000,000	360,000,000	365,000,000	370,000,000	375,000,000	380,000,000	385,000,000	390,000,000	395,000,000	400,000,000	405,000,000	410,000,000	415,000,000	420,000,000	425,000,000	430,000,000	435,000,000	440,000,000	445,000,000	450,000,000	455,000,000	460,000,000	465,000,000	470,000,000	475,000,000	480,000,000	485,000,000	490,000,000	495,000,000	500,000,000	505,000,000	510,000,000	515,000,000	520,000,000	525,000,000	530,000,000	535,000,000	540,000,000	545,000,000	550,000,000	555,000,000	560,000,000	565,000,000	570,000,000	575,000,000	580,000,000	585,000,000	590,000,000	595,000,000	600,000,000	605,000,000	610,000,000	615,000,000	620,000,000	625,000,000	630,000,000	635,000,000	640,000,000	645,000,000	650,000,000	655,000,000	660,000,000	665,000,000	670,000,000	675,000,000	680,000,000	685,000,000	690,000,000	695,000,000	700,000,000	705,000,000	710,000,000	715,000,000	720,000,000	725,000,000	730,000,000	735,000,000	740,000,000	745,000,000	750,000,000	755,000,000	760,000,000	765,000,000	770,000,000	775,000,000	780,000,000	785,000,000	790,000,000	795,000,000	800,000,000	805,000,000	810,000,000	815,000,000	820,000,000	825,000,000	830,000,000	835,000,000	840,000,000	845,000,000	850,000,000	855,000,000	860,000,000	865,000,000	870,000,000	875,000,000	880,000,000	885,000,000	890,000,000	895,000,000	900,000,000	905,000,000	910,000,000	915,000,000	920,000,000	925,000,000	930,000,000	935,000,000	940,000,000	945,000,000	950,000,